Serial No. 10/063,950   124463-2

Remarks

Applicant carefully considered the Office Action mailed on November 25, 2003. Claims 1-18 are pending in the present patent application. Of the pending claims, the Examiner indicated that claims 7 and 16 are allowed and that claims 2-4 and 11-13 are objected to. In addition, the Examiner rejected claims 5, 6, 8, 9, 14, 15, 17 and 18 under 35 USC §112, second paragraph and claims 1 and 10 under 35 USC §103(a). In response to the Office Action, Applicant amended claims 5, 6, 8, 9, 14, 15, 17 and 18 to overcome the §112, second paragraph rejection. Applicant requests further examination and reconsideration of the present patent application in view of the amendment and below remarks.

The Examiner rejected claims 5, 6, 8, 9, 14, 15, 17 and 18 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner submitted that the use of the phrase "previous claim" is indefinite as to which previous claim is referred. Applicant removed this phrase and amended claims 5, 6, 8, 9, 14, 15, 17 and 18 to expressly recite the claims that each refers to. Applicant notes that the amendment to claims 5, 6, 8, 9, 14, 15, 17 and 18 is not a narrowing amendment that would give rise to estoppel as set out in the *Festo* decisions. Applicant requests that the Examiner reconsider and remove the §112, second paragraph, rejection of claims 5, 6, 8, 9, 14, 15, 17 and 18.

The Examiner rejected claims 1 and 10 under 35 USC §103(a) as being unpatentable over Doctor (United States Patent Number 5,331,311). Applicant respectfully traverses the §103(a) rejection of the present patent application and submits that claims 1 and 10 are patentable over Doctor.

Claims 1 and 10 recite an apparatus and method for detecting a hot rail car surface, respectively. Each claim recites a rank filter for filtering an electrical signal to produce a filtered array. Claim 1 also recites a first peak detector for

-8-

Serial No. 10/063,950   124463-2

detecting a maximum filtered value of the filtered array and a first comparator for comparing the maximum filtered value to a detection threshold to produce a filtered alarm signal. Claim 10 recites similar limitations, except that this claim is directed to the actions performed by the first peak detector and first comparator.

Applicant submits that Doctor does not teach or provide a motivation suggesting the desirability of using a rank filter to filter an electrical signal to produce a filtered array. Applicant notes that the Examiner submitted that the IR filter 56 disclosed in Doctor is analogous to the claimed rank filter, but does not believe this is accurate. An IR filter typically blocks all visible light letting only infrared light pass. On the other hand, a rank filter as known to one of ordinary skill in the art of image processing, is used to sort or rank grey values in some neighborhood of every pixel, and replace the center pixel by some value in the sorted or ranked list of grey values. Accordingly, the IR filter and rank filter are not analogous. Furthermore, Applicant submits that a person of ordinary skill in the art at the time of the invention would not have a motivation to replace the IR filter in Doctor with a rank filter.

With regard to the first peak detector limitation, Applicant submits that Doctor does not teach or provide a motivation suggesting the desirability of using a first peak detector to detect a maximum filtered value of the filtered array. Doctor teaches that a preamplifier stage 58 amplifies the output generated from temperature detectors 38-52. A sample and hold stage 60 samples and holds the output from the preamplifier stage 58. A preamplifier stage 62 then amplifies the output from the sample and hold stage 60. A multiplexor 64 receives the outputs from each preamplifer 62 and sequentially feeds these outputs to an analog to digital converter 66. A CPU 70 then analyzes the outputs from the analog to digital converter 66 and generates various wheel condition indication signals. None of these amplification, signal processing and analysis operations are analogous to a first peak detector that detects a maximum filtered value from a filtered array. Furthermore, Applicant submits that Doctor provides no motivation suggesting the use of a peak detector to detect a maximum filtered

-9-

Serial No. 10/063,950   124463-2

value and thus a person of ordinary skill in the art at the time of the invention would not have a reason to implement one in Doctor.

Since Doctor is not interested in detecting a maximum filtered value as noted above, Applicant submits that Doctor does not teach or suggest the limitation of comparing the maximum filtered value to a detection threshold to produce a filtered alarm.

In light of the above-noted distinctions, Applicant submits that claims 1 and 10 are patentably distinguishable over Doctor. Accordingly, Applicant requests that the Examiner reconsider and remove the §103(a) rejection of claims 1 and 10.

In view of the foregoing, Applicant requests that the Examiner reconsider this application and allow claims 1-18.

If the Examiner has any questions regarding the present patent application, the Examiner can call Applicant's attorney, David Goldman, at telephone number (518)-387-5927 or (518)-387-5903.

Respectfully submitted,

David C. Goldman
Attorney for Applicant
Registration No. 34,336

Schenectady, New York
Dated: February 24, 2004

-10-